

# Obert, per defecte

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Compartint coneixement











Autoarxiu d'una còpia de  
qualsevol article provinent  
d'una publicació amb  
un procés de revisió

Accés gratuït  
a la producció científica

Amb alguns condicionants







this ph  
which is  
known as  
blo  
has  
because  
of both

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ACM Press, July 12-16, 2008, Atlanta, Georgia, USA.  
 ISBN 978-1-60558-048-9. July 12-16, 2008, Atlanta, Georgia, USA. \$5.00.  
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*Under have been made a single unifying*  
*under have a single unifying*  
*under have a single unifying*

of great strides have been made  
they still lack a single unifying  
theory to explain the broad range  
of empirical observations.

## 2. BLUNT IN THEORY

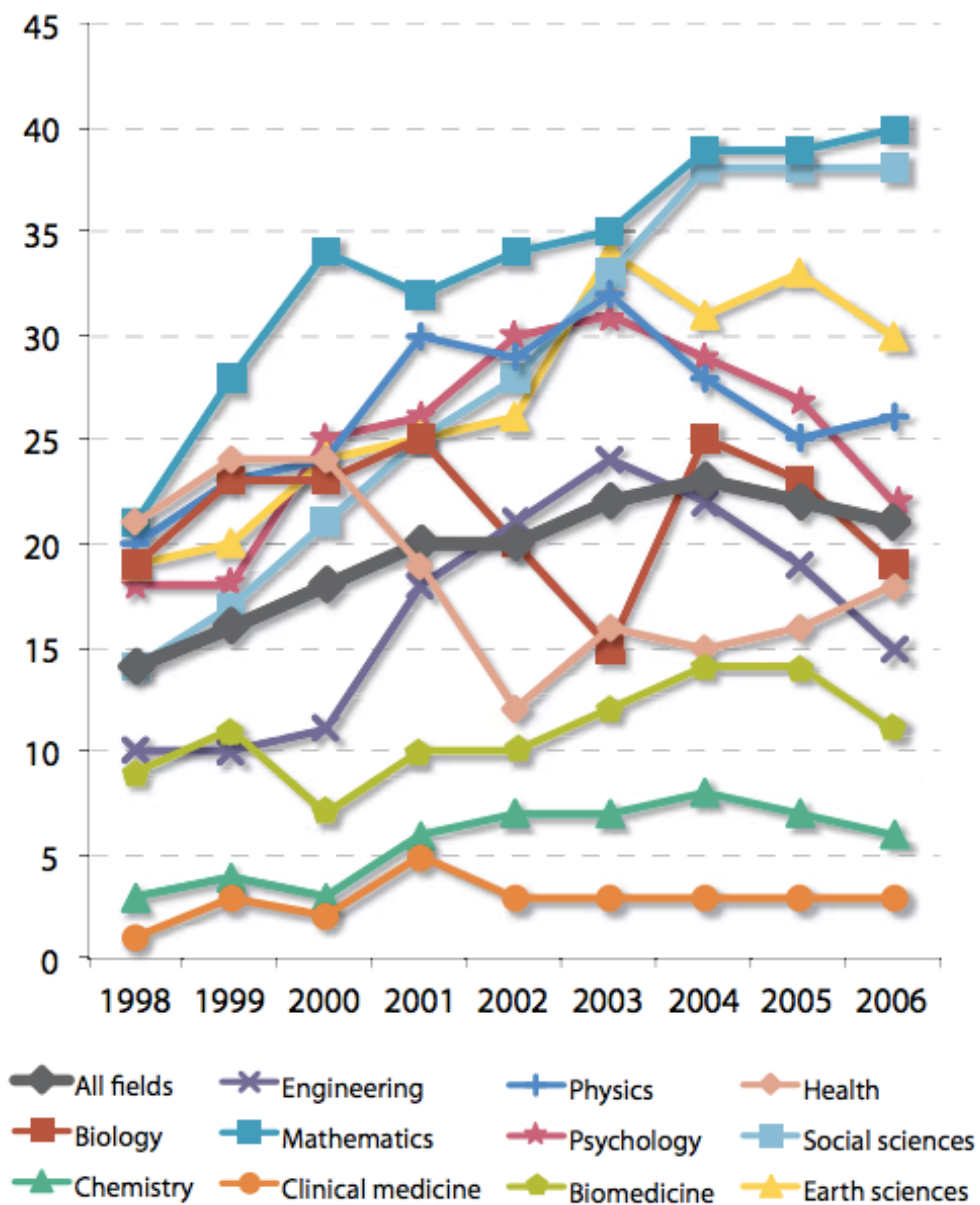
**BLOAT IN THEORY**

An interesting issue, there are several theories of bloat. For example, the replication scenario [13] states that the number of GP individuals depends on the fitness landscape. The expected functionality similar to the genetic replication scenario. The expected representation states that increasing population size leads to a GP bloat theory [20]. Another theory states that bloat is caused by crossover events exciting inactive subspaces (above average fitness) in the tree. On average the inactive subspaces produce offspring with the same fitness as their parents. On such offspring are bigger than the same fitness as the excised one, so such offspring are bigger than average. Another important theory, the nature of program search spaces theory [14, 16], predicts that above a certain size, the distribution of fitnesses does not vary with size. Since there are more long programs, the number of short programs of a given fitness is greater than the number of long programs of the same fitness. Over time GP samples longer and longer programs simply because there are more of them.

There have been some efforts to verify and mathematically explain bloat. For example, Banzhaf and Langdon [21] have shown that for a simple model where only one active code

The explanations for bloat mentioned above are largely qualitative. There have been some efforts to verify and mathematically formalise these theories. For example, Banzhaf and Langdon [3] defined a ~~representation of an~~ executable model where only the fitness, the size of active code and the size of inactive code were represented. Fitnesses of individuals were drawn from a bell-shaped curve.

While retaining the fitness of their prog. size. leading to a growth in the avg. prog. size.



**Figure 6: Percentage of the total scholarly literature available in Open Access repositories in 2010, by year of publication, broken down by discipline<sup>64</sup>**

Ruta complementària

"Guest Publication" CC BY Tobias von der Haar  
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Accès gratuit

l permís per reutilitzar  
sense restriccions





Amb un repte important



Daurat  $\neq$  Pagar per publicar

Daurat = Obert

Open Definition  
<http://opendefinition.org/>



*Obert significa que qualsevol pot accedir-hi, utilitzar-lo, modificar-lo, i compartir-lo lliurement per a qualsevol propòsit (subjecte, com a molt, a requeriments que en preservin la provinença i l'obertura)*

<http://opendefinition.org/>

Fins on hem arribat?

Punt d'inflexió

~ 50% dels articles  
en accés gratuït

... encara queda feina





«I am committed to completing the transition to open access by 2020»

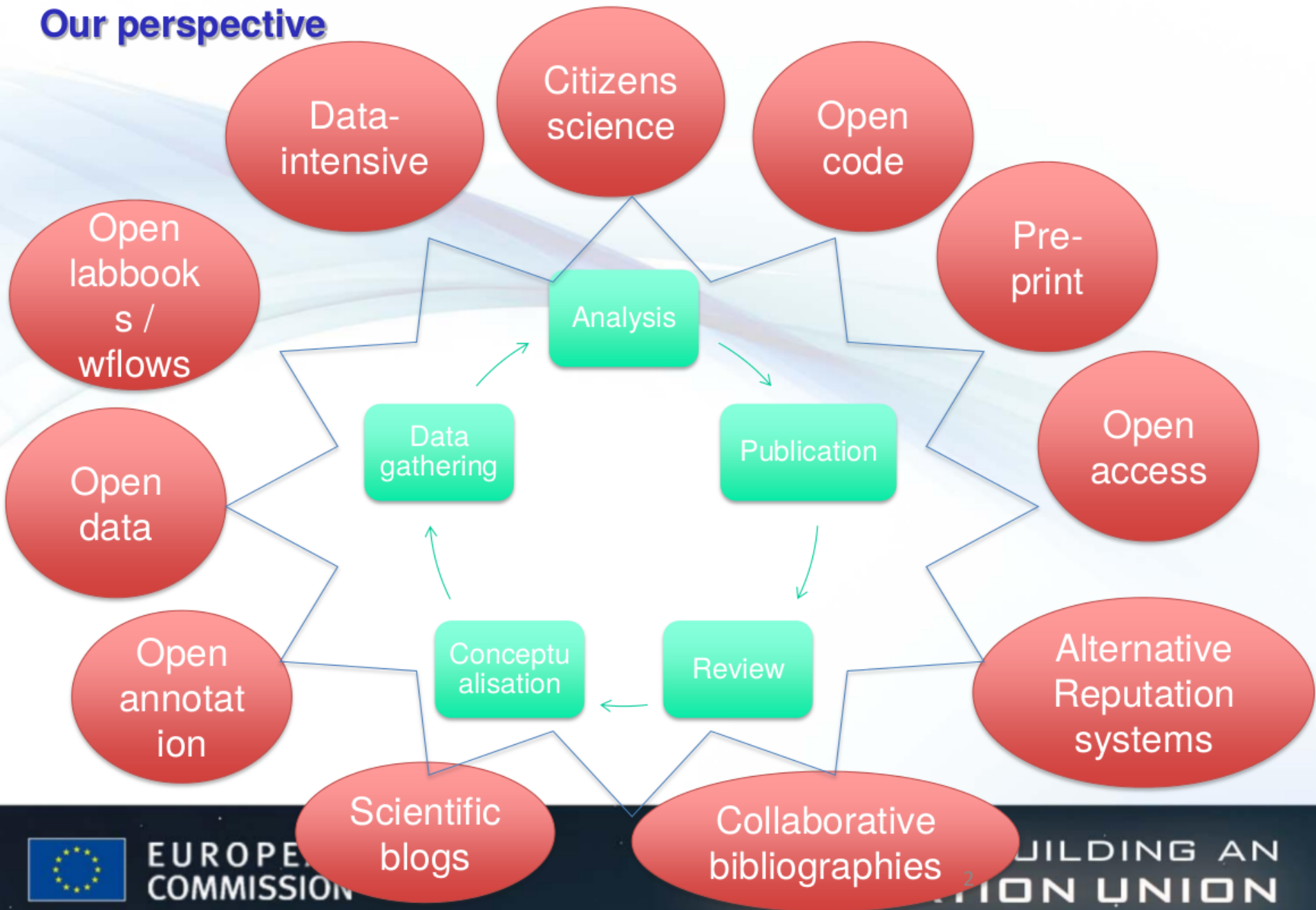
*Carlos Moedas, Frankfurt, 18 octubre 2016*

Open Science

*Open Science aims at transforming science through ICT tools, networks and media, to make research more open, global, collaborative, creative and closer to society.*

<https://ec.europa.eu/digital-agenda/en/open-science>

## Our perspective



EUROPEAN  
COMMISSION

BUILDING AN  
INTEGRATED UNION



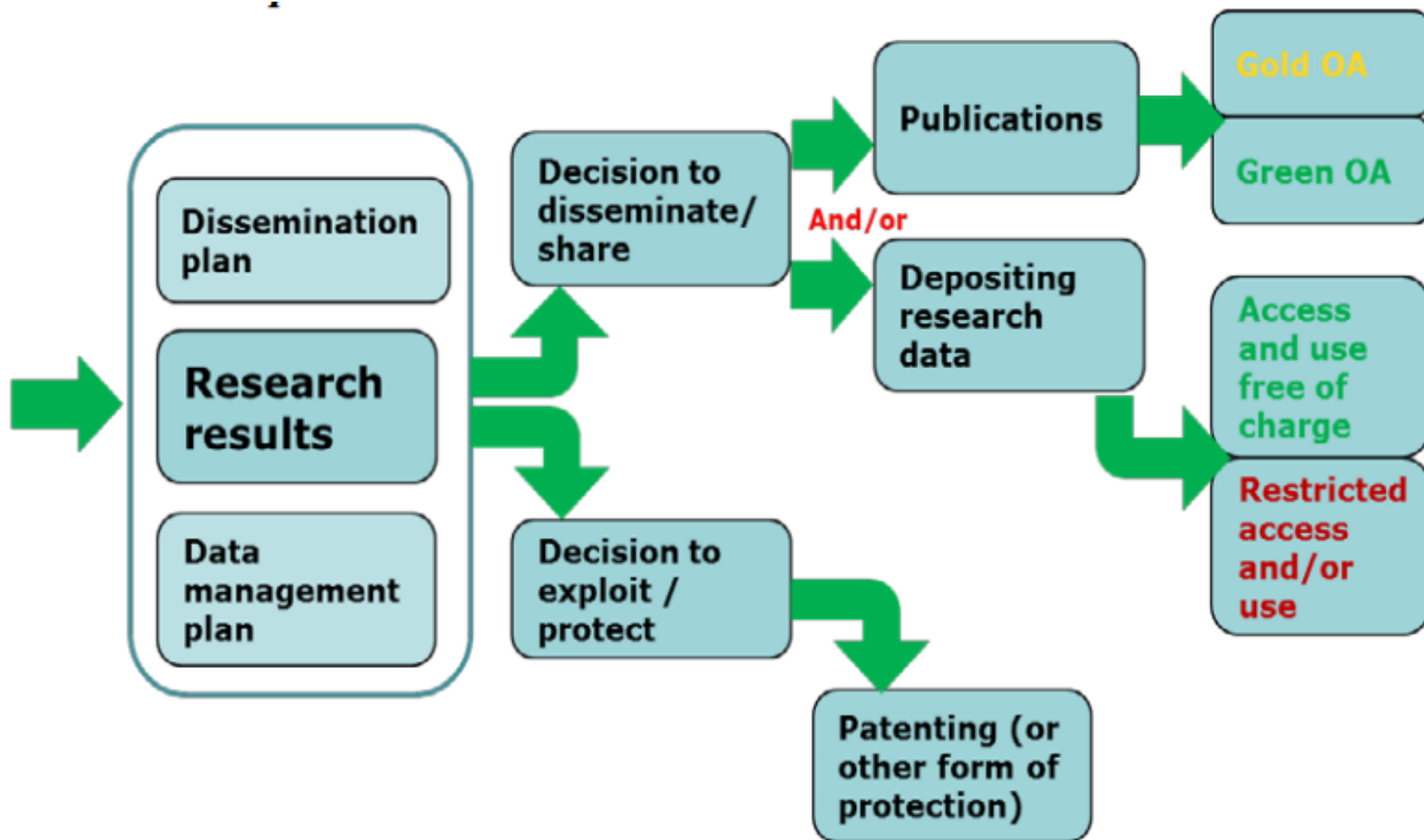
"Open" CC BY Justin Marty  
<http://www.flickr.com/photos/jmarty/128010935/>

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

# HORIZON 2020

The logo for Horizon 2020 features a small globe of the Earth positioned between the words 'HORIZON' and '2020'. A bright sunburst or starburst effect emanates from behind the globe, with rays of light extending across the entire image. The background is a deep blue gradient, suggesting a cosmic or futuristic theme.

# Research



El nou repte





“Binary” CC BY Brett Jordan

<https://www.flickr.com/photos/xlbrett/6665955101>





Dades recollides,  
generades o observades

Dades associades  
a les publicacions

A partir de 2017,  
els projectes del  
Programa H2020

#1

Cal que dipositin les dades  
en un repositori

No hi ha cap imposició  
d'un determinat

#2

Han de fer que les dades  
siguin obertes



*Tan obertes com sigui possible,  
tan tancades quan sigui necessari*

#3

Les dades haurien de ser  
"FAIR"

F *indable*

A *ccessible*

I *nteroperable*

R *e-usable*

#4

Han d'elaborar i lliurar  
un Pla de Gestió de Dades

Amb quines dades es treballarà  
On i com es guardaran  
Com es compartiran

Les universitats  
hem d'estar preparades

Hem de crear  
nous serveis i nous rols

Preparar infraestructures



Formació i conscienciació

Establir una política  
o estratègia

...I ja fa temps  
que hi treballem

Grup de treball  
al CSUC

#1

Model de pla de gestió  
de dades

#2

Eina per elaborar un  
pla de gestió de dades

#3

Recomanacions per  
publicar en un repositori

Repositori temàtic



Repositori institucional

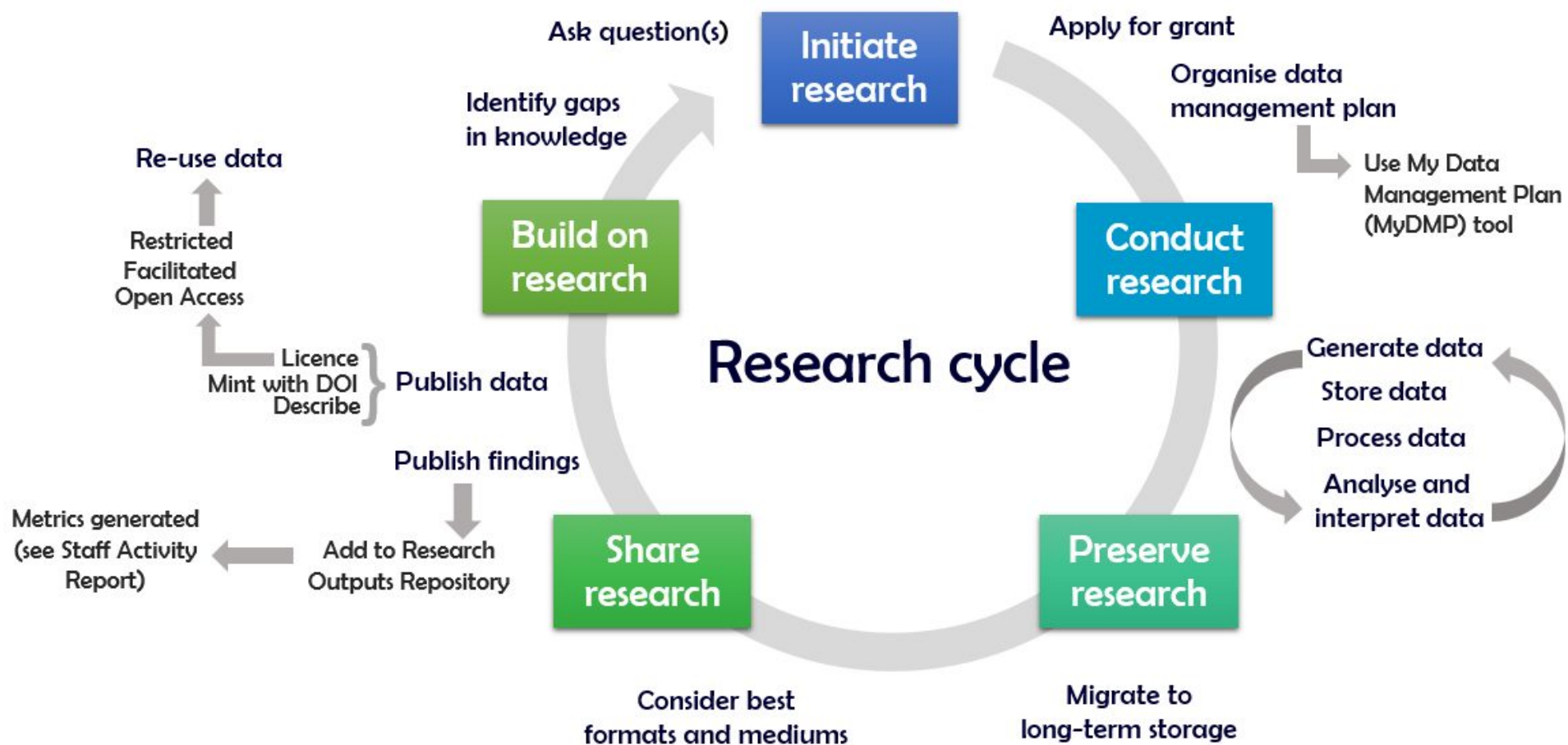
Repositori multidisiplinar

#4

Esborrany de política

#5

Anàlisi d'infraestructures



F *indable*

A *ccessible*

I *nteroperable*

R *e-usable*

Dades amb identificadors  
únicos i persistents



Hi ha una clara referència  
a la provinença de les dades

Cal utilitzar metadades  
per descriure les dades

Les dades i les metadades  
segueixen estàndards

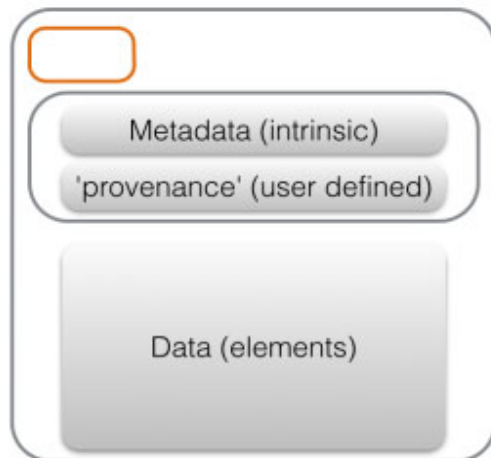
Les dades es poden recuperar  
mitjançant protocols oberts

Les dades i les metadades  
tenen associades  
una llicència d'ús

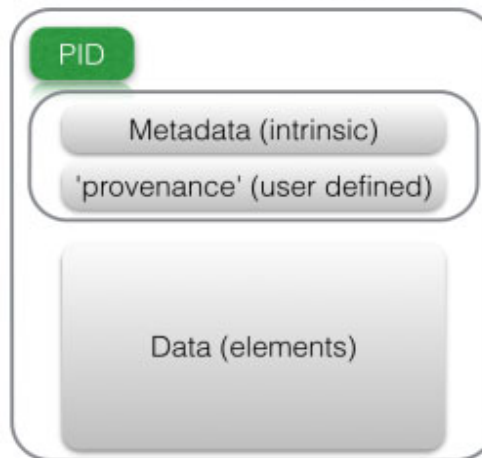
doi:10.1038/sdata.2016.18

# Data as increasingly FAIR Digital Objects

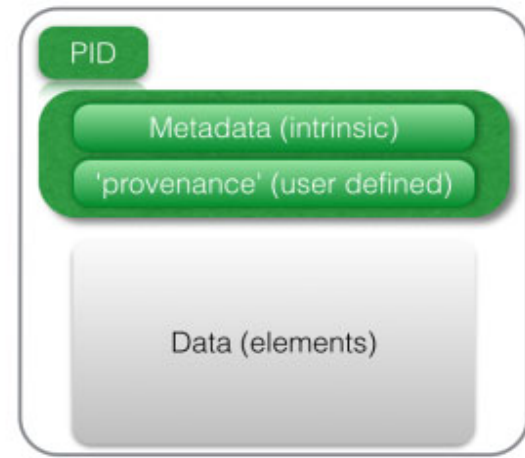
Totally UNFAIR



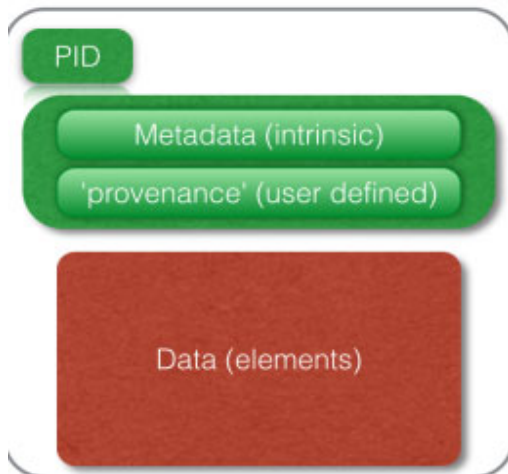
Findable  
Usable for Humans



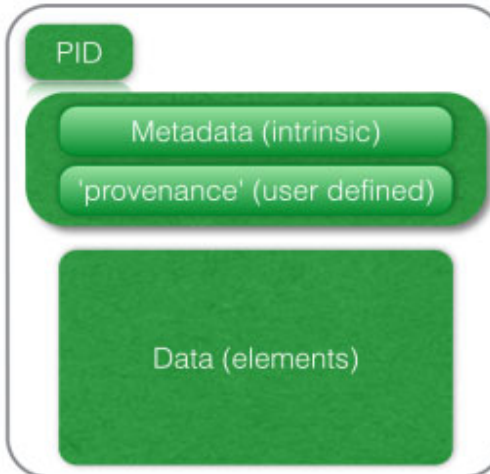
FAIR metadata



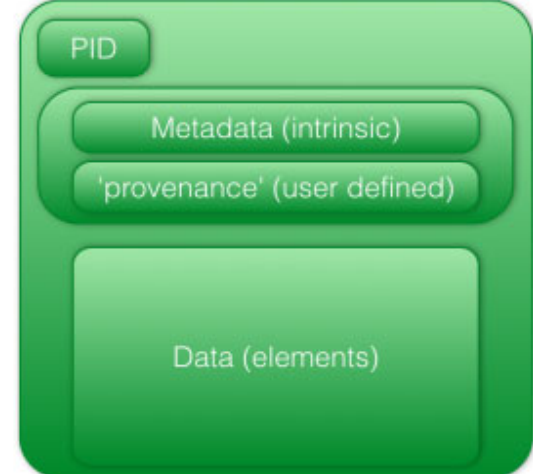
FAIR data-  
restricted access



FAIR data-  
Open Access



FAIR data-  
Open Access/Functionally Linke





Conclusió

Compartim els resultats  
de la recerca...

...en obert, per defecte

# Gràcies

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<http://www.ub.edu/odc>